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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,319	05/18/2004	Richard Yen-Hsiang Chang	174/311	7012
36981	7590	02/05/2008		
ROPES & GRAY LLP PATENT DOCKETING 39/361 1211 AVENUE OF THE AMERICAS NEW YORK, NY 10036-8704			EXAMINER EJAZ, NAHEED	
			ART UNIT	PAPER NUMBER
			2611	
			MAIL DATE	DELIVERY MODE
			02/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/849,319

Applicant(s)

CHANG ET AL.

Examiner

Naheed Ejaz

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-34 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 11/15/2007 have been fully considered but they are not persuasive because of the following:
2. Applicant argues that it is easy to see that To (2003/0167417) shows nothing like 'circuitry for selecting two, phase-adjacent ones of the clock signals that currently have transitions on respective opposite sides of transitions in a serial data signal' (Remarks, dated: 11/15/2007, (hereinafter, Remarks), page 2, paragraph A, lines 1-7). This is not persuasive since claim 1 rejection is based on 35 U.S.C 103 obviousness type of rejection and To reference is not used to reject the above mentioned limitations (see Office Action, dated: 08/16/2007 (hereinafter, OA), page 3, lines 1-3). Above mentioned limitations are taught by Chen (6,041,090) (OA, page 3, paragraph 3).
3. Applicant argues that Chen's circuitry performs no clock signal selection and Chen shows nothing comparable to applicant's 'circuitry for selecting two, phase-adjacent ones of the clock signals that currently have transitions on respective opposite sides of transitions in a serial data signal' (Remarks, page 4, paragraph 2). This is not persuasive since Chen discloses in figure 2 that clock generator 22 (figure 2) generates 5 adjacent clock signals (figure 2, col.3, lines 44-50) and among these five two of them are inputted to phase detector 34 (figure 2) through data sampler 26 (figure 2, col.3, lines 50-52) and the two clocks which are produced (claimed selected since only two clocks are produced among five) among five phase adjacent clock signals by data sampler are different for different phase detectors (figure 8, elements 34, 94 & 104).

Response to Amendment

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (6,041,090) in view of To et al. (2003/0167417) (hereinafter, To).

6. As per claim 1, Chen teaches, 'a source of a plurality of phase-distributed clock signals (figure 2, element 22, 'Clock1-Clock5', col.3, lines 44-47); and circuitry for selecting two, phase-adjacent ones of the clock signals that currently have transitions on respective opposite sides of transitions in a serial data signal (figure 2, element 25, 'clock3, clock4', & 21B, col.2, lines 32-52, col.5, lines 66-67, col.6, lines 1-6), the circuitry separately monitoring the consistency with which each of the selected two, phase-adjacent clock signals has transitions on each side of the transitions in the serial data signal (figure 2, elements 34, 36 & 38 combined, col.4, lines 51-67, col.5, lines 1-16, col.5, lines 66-67, col.6, lines 1-6).

Chen does not teach selecting one of the selected two clock signals based on the consistency.

To teaches, 'selecting one of the selected two clock signals based on the consistency' (figures 5 & 12; page # 2, paragraphs # 0030, 0032, page # 3, paragraphs # 0033 & 0036).

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to implement the teachings of To into Chen in order to generate clock for data capture by generating a single synthesized clock between two of the selected clocks in order to accurately detect and synchronize a received data signal as taught by To (page # 2, paragraph # 0030).

7. As per claims 2, Chen recovers data output 32 from data sampler 26 (figure 2) which is based on recovered clock 27 (figure 2, col.3, lines 44-50, col.4, lines 34-41).

Allowable Subject Matter

8. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 8-34 are allowed.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naheed Ejaz whose telephone number is 571-272-5947. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number:
10/849,319
Art Unit: 2611

Page 5

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Naheed Ejaz
Examiner
Art Unit 2611

1/30/2008

NE


CHIEH M. FAN
SUPERVISORY PATENT EXAMINER